

A COMPANION OF THE SUNFISH.

BY C. F. HOLDER.

Around the southern islands of the Santa Barbara group, where the tides come up and down in fitful measure, is a famous feeding ground for the sunfish of the Pacific, *Mola mola*. This extraordinary member of the family, though standing high in the list of fishes, is very unfishlike in appearance, resembling some Japanese monstrosity. The fish is more or less oval, covered with a hard skin that is enveloped with a thick mucus. The dorsal fin is large and high, and directly below it extends the anal fin, which resembles it in size and shape. Tail the mola has none, the body apparently being chopped off, a mere ridge, controlled by powerful muscles, taking its place and being entirely useless in the sense of a tail.

Thus equipped the sunfish would naturally be a slow swimmer, and so lethargic is it that the writer has often approached it in a boat. On one occasion a boat hook was hooked into the gills of a large sunfish, which was caught with little or no resistance.

One of the largest specimens observed by the writer grounded on the bar of the St. John's River and attracted so much attention that it was caught and carried ashore where it was provided with red eyes and exhibited as a "sea monster." The fish was ten feet high, or that measurement between the tips of the upper and lower fins. A much larger specimen, eleven feet high, was observed in California waters.

Off the islands of the Santa Barbara channel these fishes are very common in midsummer, lying at the surface in the choppy sea and apparently exposing their sides to the hot semitropic sun. When lying in this position, the sea washing over them, they resemble a piece of wreckage, and are, without doubt, so considered by numbers of birds, especially the shags, which, when weary from long flight and preferring a dry roost, alight on them and retain their position without alarming the fish. Several birds have been observed resting on a single sunfish, and some of the fishermen assume that the fish, being infested with parasites, take this position either to allow the sun to destroy them or thinking that the birds will devour them. In all probability the matter of parasites does not enter into the question as an explanation. The fish enjoys floating at the surface where the water is warm and the birds alight upon it simply as a rest, just as they would upon any floating object.

Sunfish could be caught in numbers off the islands mentioned, but no use having been discovered for them, they have no market value. Their muscles are so hard and elastic that when cut into small pieces and thrown upon the ground they rebound. In one small seaport the writer found that the elastic tissue was used by the fishermen's boys in the manufacture of baseballs.

The young of the sunfish is a singular looking little creature, hatching from eggs deposited on the high seas, floating at the surface. They were supposed for many years to be a different species, so unlike were they in general appearance to the adult sunfish.

Remarkable Icelandic Features.

Iceland offers such exceptional advantages and opportunities to the sportsman, the tourist, the naturalist, the mountaineer, and the seeker of health, that, in no distant future, it is destined to become the tourist field of Europe. The glaciers of Switzerland, the fjords, the salmon rivers, and the midnight sun of Norway are all there, and, moreover, the volcanoes, grottoes, and solfataras of Italy, on a grander scale; the pure and clear atmosphere of Italy, the mineral springs of Germany, and the geysers or hot springs of the Yellowstone Park, are all there. Nowhere has Nature been so

spendthrift in assembling wonderful phenomena on one spot, says the Philadelphia Ledger.

The summer lasts from June till the first week in October. A feature noticed by all travelers is the clearness and purity of the atmosphere, rivaling that of Italy; mountains are distinct at a distance of 100 miles.

There is no country in the known world where volcanic eruptions have been so numerous as in Iceland, or have been spread over so large a surface. No part of the isle is wholly free from the marks of volcanic agency; and it may be truly called the abode of subterranean heat. Vesuvius is dwarfed into insignificance by the twenty volcanoes of Iceland, all of them larger. The lava flood at the eruption in Iceland in 1875 has been computed to contain 31,000 millions of cubic feet, while the largest eruption of Vesuvius on record, that of 1794, threw out only 730 millions of cubic feet of lava. Some of the Icelandic lakes are studded with volcanic isles, miniature quiescent Strombolis, whose craters rise from bases green with a prolific growth of angelica and grasses. Even in the bosom of the sea, off the coast, there are hidden volcanoes. About the end of January, 1783, flames were observed rising from the sea some thirty miles off Cape Reykjanes; they lasted several months, until a terrible eruption commenced 200 miles away, in the interior,

the volcano still bursts out among regions of eternal snow, and the impetuous thundering of the geysers continues to disturb the stillness of the surrounding solitude.

Iceland is a wide field open for discovery, and the country everywhere presents objects to fill the mind with astonishment.

On any part of the coast one will find innumerable gulls, eider ducks, etc. In the interior, wild ducks, grouse, whimbrels, plovers, and snipes are plentiful on the moors and heaths. Here are the best stocked, unpreserved moors in the world; twenty to thirty brace of grouse can be bagged by a fair shot in the course of a few hours. Besides, here are swans, curlews, and the chance of a shot at a reindeer.

A picturesque scene is the annual killing of black-birds and auks, which nestle in the almost inaccessible rocks along the coast. Some of these are as high as 1,000 feet, and their clefts and ledges can only be visited by letting yourself down in a line fastened on the top. The line consists of four to seven thongs of ox hide twisted together, strong enough to carry a man and his booty.

The rock climber has a long stick in his hand to balance himself; one of its two ends is an iron crook, the other a snare of horsehair to entrap the birds. Some

lines are sixty to eighty meters long, and every climber has two, one of which he pulls when he wishes to be hauled up. Coming to a ledge in the rocks, he unties himself and walks along, picking up eggs and killing birds. Of course great dangers are attached to this manner of fowling. A sharp edge projecting from the rock may cut the line. The climber may inadvertently loosen a stone or make a false step. Then the unhappy man is invariably torn to pieces by projecting angles and fore he finds his grave in the merciful deep below.

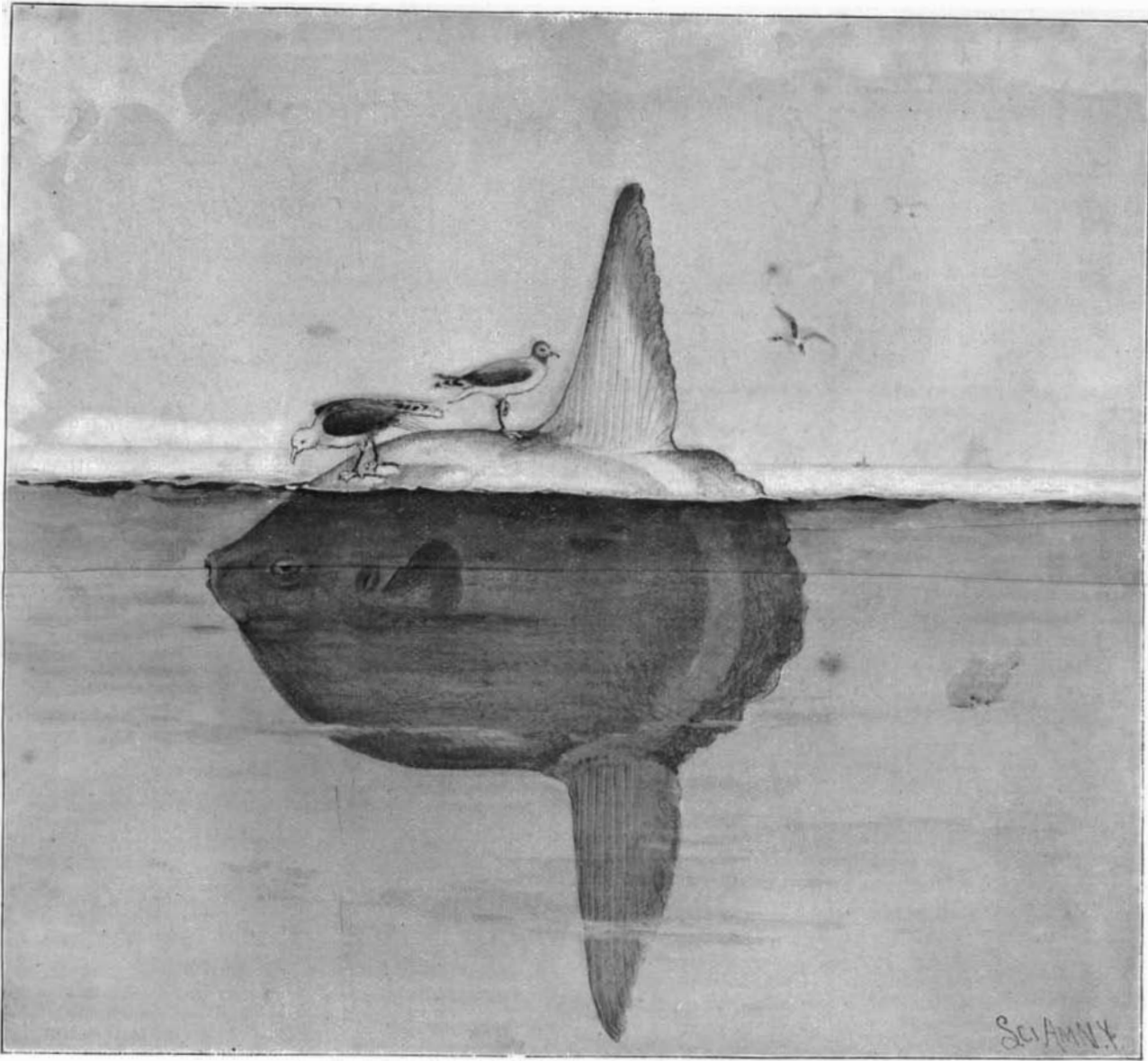
The water of the aerated springs in Iceland possesses a strong but grateful degree of pungency, very much like that of soda water after it has been exposed to the air for a few seconds. The water is kept in constant and violent agitation by the escape of carbonic acid gas, and, taken in large quantities, may cause intoxication. The natives call these springs ale wells.

The accommodation in Iceland is not equal to that which the Land of the Midnight Sun and Switzerland give to the traveler. The only hotels to be found are in the half a dozen towns on the coast. In the interior one must take lodgings on a farm or camp out in a tent. It should not be omitted to state that the only mode of conveyance is on horseback, on the ponies which have been praised so much by every traveler who has written upon Iceland.

Iceland has the same right as Norway to be called "The Land of the Midnight Sun." The midnight sun can be seen in the north of the island. There is the difference that this seagirt Land of the Midnight Sun is unexplored.

Tugs Carried by Steamers.

The Hamburg-American line has recently acquired two steel tugs, about 30 feet long, each furnished with a 10 horse power petroleum motor and capable of hauling a load of 300,000 pounds at a speed of over 9 miles an hour. These tugs are to be stationed in the West Indies, and will be carried from one port to another by the steamers of the Hamburg-American line for the purpose of hauling lighters. The company is thus independent of any local deficiencies in the lighterage. The petroleum motors are of great advantage, as they are ready for starting upon short notice, and require no boilers or coal bunkers.—Umland's Wochenschrift.



MOLA MOLA, THE SUNFISH OF THE PACIFIC.

when they disappeared. A few years ago rocks and islets emerged from the sea in this place. Another volcanic feature is the solfatara valleys, plains studded with a number of low, cone-shaped hillocks, from whose tops jets of steam ascend. In other places boiling mud issues from the ground six to eight feet in the air, as in New Zealand. Standing on the feeble crust where literally fire and brimstone are in incessant action, having before your eyes terrible proofs of what is going on beneath you, enveloped in vapors, your ears stunned with noises, is a strange sensation.

As to the hot springs, those in Reykjadal, though not the most magnificent, are perhaps the most curious among the numerous phenomena of this sort in Iceland. On entering the valley you see columns of vapor ascending from different parts of it. There is a number of apertures in a sort of platform of rock. The water is at 212° Fahrenheit, and it rises two or three feet into the air. A river flows through the valley, in the midst of which a jet of boiling water issues with violence from a rock raised but a few feet from the icy cold water of the river. Not far from this place is the grotto or cave of Surt, which is so large that no one has penetrated to its inner end. In forming these scenes Nature seems to have deserted all her ordinary operations and to have worked only in combining the most terrific extremes which her powers can command. Nor is she yet silent. After the lapse of ages the fire of